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(54) **High dynamic range error rate monitor**

(57) There is provided an error rate monitor (10) incorporating a counter (30) which is incremented as errors are detected in a data stream passing through an interface unit (20) connected to the counter (30). The counter (30) is also simultaneously decremented at a rate proportional to an exponential of a value presently

stored in the counter (30). The monitor (10) thereby provides from the value stored in the counter (30) a measure of error rate in the data stream, the value substantially proportional to a logarithm of error rate in the data stream, thereby providing the monitor (10) with a relatively large error rate monitoring dynamic range.

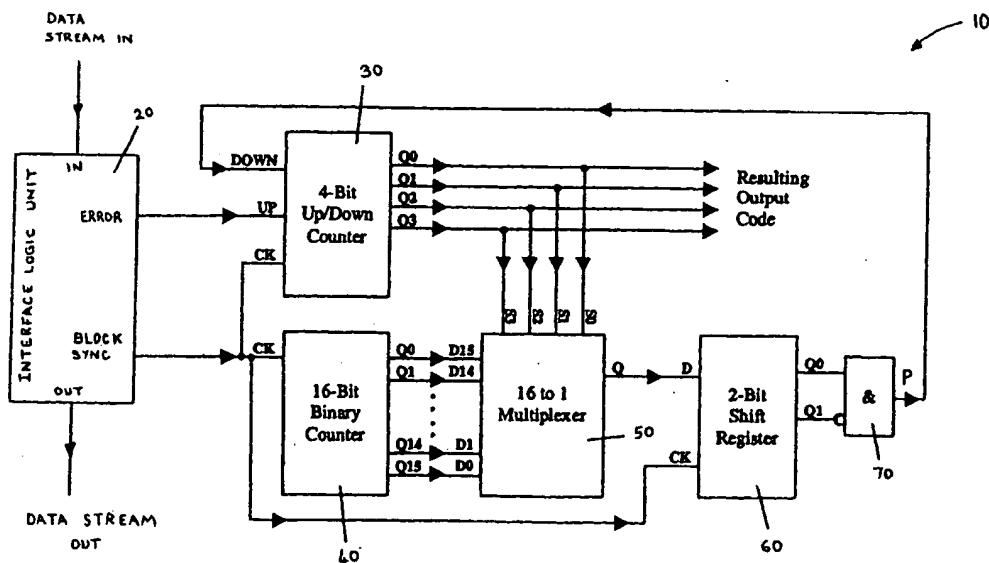


Fig. 1



European Patent  
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## EUROPEAN SEARCH REPORT

Application Number  
EP 00 30 9891

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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Y	* abstract *	9,10	
	* column 9, line 34 - column 10, last paragraph *		
A	* figure 5 *	6-8	
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A	KEREKES I ; ANIDO G ; BRADLOW H S ; EYERS T: "Dimensioning of leaky buckets to be used as monitors" ELECTRONICS LETTERS, vol. 29, 21 January 1993 (1993-01-21), pages 245-246, XP002271033 UK * the whole document *	1-11	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 20 February 2004	Examiner Stolte, N
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
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20-02-2004

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82